Claims

1. A method for establishing calls in a communications network comprising a fixed network section (300) and a mobile network section (350), the method comprising the steps of:

- in the fixed network section (300) of said communications network, receiving a called party address from a calling party (110) served by a fixed network switch (302A);
- determining if a called party addressed by said called party address is a mobile called party (160) served by the mobile network section (350) of the communications network;
- in response to determining that the called party is a mobile called party (160), routing signaling messages associated with the establishment of the call to a fixed network node capable of initiating queries to and receiving responses from a home location register (358) of the mobile network section (350);
- at said fixed network node, initiating a query to a home location register (358) associated with the mobile called party (160) and receiving a roaming number for that mobile called party (160); and
- from the fixed network switch (302A) serving the calling party (110), directly routing the call to a mobile network switch (352A) currently serving the mobile called party (160) based on the roaming number.

2. The method according to claim 1, wherein the step of determining if the called party is a mobile called party further comprises the step of forwarding the call to another fixed network switch when the fixed network switch (302A) serving the calling party (110) is not configured for determining if the called party a mobile called party served by the mobile network section (350).

3. The method according to any of the claims 1 or 2, wherein the step of determining if the called party is a mobile called party comprises:

- at the fixed network switch, querying a database in which all mobile called party addresses are marked as "potentially ported"; and
- treating a mobile called party address as a called party address subject to number portability procedures by routing signaling messages associated with the establishment of the call to a number portability server (320, 340).

4. The method according to claim 3, wherein the number portability server is an enhanced number portability server capable of initiating queries to and receiving responses from a home location register (358) of the mobile network section (350).

5. The method according to any of the claims 3 or 4, wherein the enhanced number portability server is a signaling transfer point (320) connected to or comprising a number portability database (340).

6. The method according to any of the claims 1 or 2, wherein the step determining if the called party is a mobile called party comprises:

- querying a database in which all mobile called party addresses are marked as addresses requiring intelligent network handling; and
- treating a mobile called party address as a called party address subject to intelligent network procedures by routing signaling messages associated with the establishment of the call to an intelligent network service control point.

7. The method according to claim 6, wherein the intelligent network service control point is capable of initiating

queries to and receiving responses from a home location register (358) of the mobile network section (350).

8. A Signaling Transfer Point STP (320) of a SS7 network, comprising:

- means for bidirectionally connecting to a plurality of SS7 links (306, 356), each of said SS7 links linking the STP (320) to other SS7 entities (302, 352, 358);
- means for receiving a number portability query from a fixed network section (300) of the network;
- means for querying a number portability database (340) for determining if a called party address received in a number portability query is a mobile called party (160) served by a mobile network section (350) of the network;
- in response to determining that the called party is a mobile called party (160), initiating a query to a home location register (358) associated with the mobile called party (160) and receiving a roaming number for that mobile called party (160); and
- returning the roaming number as a response to the number portability query.

9. The STP (320) according to claim 6, further comprising the number portability database (340).

10. A network arrangement for a communications network, comprising:

- a fixed network section (300), the fixed network section (300) comprising: a plurality of subscriber terminals (110); a plurality of fixed network switches (302); voice connections (304) for interconnecting the fixed network switches (302); and signaling connections (306) for connecting the fixed network switches to at least one signaling transfer point (320);
- a mobile network section (350), the mobile network section (350) comprising: a plurality of mobile subscriber terminals (160); a plurality of mobile network switches

(352); voice connections (354) for interconnecting the mobile network switches (352); a home location register (358); and signaling connections (356) for connecting the mobile network switches (352) and the home location register (358) to at least one signaling transfer point (320);

- the fixed network section (300) further comprising a fixed network node capable of initiating queries to and receiving responses from the home location register (358) of the mobile network section (350);
- at least one of the fixed network switches (302) comprising: means for determining if a call originating in the fixed network section is terminating in the mobile network section; means for routing signaling messages associated with the establishment of a call terminating in the mobile network section (350) to said fixed network node for obtaining a roaming number for completing the call; and means for directly routing the call to a mobile network switch (352A) currently serving a mobile called party (160) based on the roaming number.

11. The network arrangement according to claim 10, wherein all fixed network switches (302) comprise: means for determining if a call originating in the fixed network section is terminating in the mobile network section; means for routing signaling messages associated with the establishment of a call terminating in the mobile network section (350) to said fixed network node for obtaining a roaming number for completing the call; and means for directly routing the call to a mobile network switch (352A) currently serving a mobile called party (160) based on the roaming number.

12. The network arrangement according to any of the claims 10 or 11, wherein, at the fixed network switches, the means for determining if a call originating in the fixed network section is terminating in the mobile network section comprise

a database in which all mobile called party addresses are marked as "potentially ported"; and wherein the fixed network node capable of initiating queries to and receiving responses from the home location register (358) of the mobile network section (350) is comprised of the signaling transfer point (320) and a number portability database (340).

13. The network arrangement according to any of the claims 10 to 12, wherein the signaling transfer point (320) comprises a signaling transfer point according to claim 8.

14. The network arrangement according to any of the claims 10 or 11, wherein, at the fixed network switches, the means for determining if a call originating in the fixed network section is terminating in the mobile network section comprise a database in which all mobile called party addresses are marked as addresses requiring intelligent network handling; and wherein the fixed network node capable of initiating queries to and receiving responses from the home location register (358) of the mobile network section (350) is comprised of an intelligent network service control point capable of initiating queries to and receiving responses from a home location register (358) of the mobile network section (350).